UST 620153
ERTS 649246

# Transmittal

Terracon



**DATE:** July 9, 2014

**TO:** Department of Ecology – Northwest Regional Office
Toxics Cleanup Program
3190 160th Avenue SE
Bellevue, Washington 98008

**FROM:** Michael Noll, Senior Project Manager

**REGARDING:** Taqueria El Rinconsito **PROJECT NUMBER:** 81137082

**TRANSMITTED VIA:** ☒ U.S. Priority Mail ☐ FedEx ☐ Hand-Delivered ☐ Courier

Enclosed please find the following items:

| Copies | Date | Description |
|---|---|---|
| 1 Bound | July 8, 2014 | UST Decommissioning and Soil Interim Action Report, Taqueria El Rinconsito Restaurant, 301/305 Central Avenue North & 215 East Smith Street, Kent, King County, Washington |

Please notify me at once if enclosures are not received as listed above.

A copy of the report will be mailed to the Ecology UST Section Office for their files.

Respectfully Submitted:

Michael D. Noll

Michael D. Noll, L.G., L.H.G.
Senior Project Manager
mdnoll@terracon.com

cc: (via email, w/o enclosures) Ms. Melissa Schafer – Partners in Care

# UST Decommissioning and Soil Interim Action Report

**Taqueria El Rinconsito Restaurant**
**301/305 Central Avenue North & 215 East Smith Street**
**Kent, King County, Washington**

July 8, 2014
Project No. 81137082
ERTS #649246.
UB Project No. 10-1641-10

**Prepared for:**
Vivolo Family LLC
c/o Union Bank as Trustee
Orange, California

**Prepared by:**
Terracon Consultants, Inc.
Mountlake Terrace, Washington

Terracon

July 8, 2014

Vivolo Family LLC
c/o Union Bank as Trustee
500 South Main Street, Suite 320
MC 4-450-320
Orange, California 92868

Attn: Mr. Ryan Marcos

Subject: UST Decommissioning and Soil interim Action Report
Taqueria El Rinconsito Restaurant
301/305 Central Avenue North & 215 East Smith Street
Kent, King County, Washington
Terracon Project No. 81137082
UB Project No. 10-1641-10

Dear Mr. Marços:

Terracon Consultants, Inc. (Terracon) is pleased to submit this UST Decommissioning and Soil Interim Action Report documenting our observations, soil compliance sampling, and laboratory analysis associated with the excavation and removal of five underground storage tanks (USTs) and in-place closure of one UST, and the excavation of accessible petroleum-contaminated soil (PCS), at the above-referenced site. Our services were completed in accordance with the Master Environmental Services Agreement between Terracon and Union Bank, N.A. (UB) dated March 7, 2011; and with Terracon's Work Plan and Cost Estimate No. P81130257RRR, dated April 16, 2014, the Change Order to P81130257RRR dated June 3, 2014, and the Change Order to P81130257RRR dated June 6, 2014.

We appreciate the opportunity to perform these services for Union Bank. Please contact the undersigned at (425) 771-3304 if you have questions regarding the information provided in the report.

Sincerely,

**Terracon Consultants, Inc.**

Michael D. Noll, L.G., L.H.G.
Senior Project Manager

for Adam A. Stauffer
Project Geologist

Matt Wheaton, E.I.T., L.G.
Department Manager

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## APPENDICES

# 1.0 INTRODUCTION

In accordance with our April 2014 Proposal for UST Decommissioning and Soil Interim Action, Terracon Consultants, Inc. (Terracon) was retained by Vivolo Family LLC, c/o Union Bank as Trustee, to provide project management and oversight, and conduct compliance soil sampling, during the removal of up to five underground storage tanks (USTs) and associated accessible product piping, the excavation and offsite disposal of up to 55 tons of accessible petroleum-contaminated soil (PCS), and the removal of up to 3,000 gallons of petroleum-impacted water and groundwater from the USTs and/or site excavations for offsite disposal. Vivolo Family LLC, c/o Union Bank as Trustee, authorized a change order for the removal of a sixth UST discovered during the site excavation activities, and the closure-in-place decommissioning of one UST that was found to be located too close to the City of Kent roadway for the tank to safely be removed. Vivolo Family LLC, c/o Union Bank as Trustee, also authorized the excavation and offsite disposal of up to 120 additional tons of accessible PCS, the removal of up to 1,000 additional gallons of petroleum-impacted groundwater from the site excavation for offsite disposal, and the in situ treatment of soil and groundwater using up to 175 pounds of Regenesis Oxygen Release Compound – Advanced (ORC-A®). The UST decommissioning, PCS excavation and removal, and excavation dewatering activities were performed by IO Environmental & Infrastructure, Inc., (IOEI) of Bellevue, Washington, under contract to Terracon.

The compliance soil sampling activities were conducted in accordance with the requirements of the Underground Storage Tank Statute & Regulations, Chapter 173-360 Washington Administrative Code (WAC). The PCS and petroleum-impacted groundwater removal work and the ORC-A® application activities were performed as an independent remedial action to protect human health and the environment, and meet the requirements of the Washington State Model Toxics Control Act (MTCA) Cleanup Regulation, as established in Chapter 173-340 WAC, as an initial step toward regulatory closure. The interim remedial action work was performed in accordance with MTCA and the *Guidance for Remediation of Petroleum Contaminated Sites*, Washington State Department of Ecology (Ecology) Publication No. 10-09-057, dated September 2011. In particular, the independent remedial action performed at the site was conducted as a substantial equivalent of an Ecology-conducted or supervised remedial action, in accordance with WAC 173-340-545(2).

## 1.1 Site Description

| | |
|---|---|
| **Site Name** | Taqueria El Rinconsito Restaurant/Former Time Oil Gas Station |
| **Site Location/Address** | 301/305 Central Avenue North & 215 East Smith Street<br>Kent, King County, Washington 98032 |
| **General Site Description** | The site consists of King County Tax parcels 9179601735, 9179601745 and 917601585. The subject site is a 0.31-acre tract of land improved with an approximately 1,656-square foot restaurant building, paved drive-thru and parking lot, and landscaping. |

A Site Diagram depicting the general layout of the site is included on Figure 1, as shown on a portion of the 1994 Renton, Washington USGS Topographic map, and Figure 2, identifying the entire site, of Appendix A. A site plan depicting the approximate locations of the underground storage tanks (USTs and sampling locations is included as Figure 3, of Appendix A. Soil sample concentrations are shown on Figure 4 and Figure 5, of Appendix A. A summary table of soil sample results is included in Appendix B. Photographs depicting the site activities are included in Appendix C.

## 1.2 Project Information and Previous Investigations

The site is located at 301 Central Avenue North (also previously addressed as 305 Central Avenue North and as 215 East Smith Street) in Kent, King County, Washington. The site has been improved with a restaurant building, asphalt paved drive-thru and parking areas, and landscaped areas.

### 1.2.1 Previous Site Investigation by Others

Aerotech Environmental Consulting, Inc. (Aerotech) prepared a Phase I Environmental Site Assessment (ESA) for the site, dated June 29, 2010. According to the ESA, a gas station was historically located in the eastern portion of the site from at least 1935 to 1953. According to Aerotech, the gas station was equipped with two 500-gallon underground storage tanks (USTs), a fuel pump island and canopy, and a service bay with a "grease shed" and a hoist. In 1953, the original gas station building was demolished and replaced by a new gas station. The new gas station building was reportedly built in the west-central portion of the site. According to Aerotech, the 1953 gas station was equipped with one 5,000-gallon UST and one 6,000-gallon UST, a fuel pump island, a service bay with a hydraulic hoist, and a car wash. The historical gas station structures were reportedly demolished in approximately 1972 and replaced with the existing site structure. Aerotech concluded that at least two USTs remained present at the site; however, the site was not listed as a UST facility in the Ecology UST database.

Aerotech identified the on-site USTs, the historical site use as gas stations, and potential for encountering additional USTs and a hoist with subsurface components associated with the historical on-site gas station, as recognized environmental conditions (RECs), and recommended further action. Although not identified as RECs, Aerotech stated that the Jack-in-the-Box/Strains Cascade Services facility located south (upgradient) of the site, on the south side of East Smith Street, is listed in the Ecology Confirmed and Suspected Contaminated Sites List (CSCSL) database and the Leaking Underground Storage Tank (LUST) database.

### 1.2.2 Previous Site Investigation by Terracon

Terracon conducted a Limited Site Investigation (LSI) and prepared a report, dated November 20, 2013. The LSI consisted of a limited historical and regulatory file review, a geophysical survey, a subsurface investigation using a direct-push drilling rig, and an exploratory excavation investigation. During the regulatory file review, no Ecology records were found for the site; however, regulatory records were found and reviewed for the adjacent property to the south, as described below.

According to Ecology files, a UST and hydraulic hoist were removed from the Jack-in-the-Box/Strains Cascade facility located approximately 75 feet south of the site (across East Smith Street) in 2011. Eight soil borings were advanced at the Jack-in-the-Box property to depths of approximately 21.5 feet below the ground surface (bgs). Groundwater was encountered between 5.5 and 7.5 feet bgs. Based on laboratory analytical results, soil and groundwater at the facility is impacted with benzene and gasoline-range total petroleum hydrocarbons (TPH) above the MTCA Method A cleanup levels. Based on the inferred northwesterly groundwater migration direction (towards the site) and the detected concentration of groundwater impacts, Terracon concluded that there is the potential that impacts from this property have migrated, or may be migrating, towards the site.

Terracon subcontracted a geophysical survey service provider to assess the known USTs on the north side of the structure and to assess for undocumented USTs, UST excavations, and other potential anomalies on the site. The survey included a magnetic survey to detect and map the locations of buried ferrous (iron-bearing) objects, and ground penetrating radar (GPR) to map both natural and man-made subsurface features such as USTs, utilities, backfilled excavations, and similar features. The survey was performed throughout the exterior paved surfaces of the site adjacent to the existing restaurant. Three areas of magnetic anomalies were identified, located north, east, and south of the restaurant (Figure 2). These anomalies consisted of the following:

- A buried vent line running from the northern USTs to the northwest corner of the restaurant building was located.
- Two anomalies (possible USTs or buried concrete substructures) were identified east of the northern USTs, near the northeast corner of the restaurant building.
- Three potential USTs were identified south of the drive-thru lane, located partially below the lawn and the adjacent sidewalk right-of-way (ROW).
- A potential steel product line was detected, running from the easternmost southern UST to the southeast corner of the restaurant.

In October 2013, Terracon subcontracted a Washington State licensed driller to advance seven soil borings (B-1 through B-7) at the site to maximum depths of approximately 12 feet bgs using

a truck-mounted direct-push drill rig. Borings B-1 through B-5 were advanced near the northern USTs, and near the northeastern corner of the restaurant building (former dispenser islands area), and borings B-6 and B-7 were advanced near the southern USTs (Figure 2). Soil and groundwater samples collected from each boring were analyzed for gasoline-, diesel-, and oil-range TPH; volatile organic compounds (VOCs), including benzene, toluene, ethylbenzene, and xylenes (BTEX); and lead. The laboratory analytical results for the soil and groundwater samples collected from boring B-6 exceeded the MTCA Method A cleanup levels for gasoline-range TPH, diesel-range TPH, ethylbenzene, and/or naphthalenes. The laboratory analytical results for the soil and groundwater samples collected from borings B-1 through B-5 and B-7 were either non-detect, or well below the MTCA Method A cleanup levels.

In November 2013, Terracon subcontracted an excavation contractor to complete two exploratory excavations in the vicinity of the geophysical survey anomalies located near the northeast corner of the restaurant building, and south of the asphalt-paved drive-thru located south of the restaurant building. No USTs were found in the excavations advanced northeast of the restaurant building, to depths of approximately 2.5 to 5 feet bgs. A rusty approximate 2-inch diameter steel pipe with an east-west orientation was found at approximately 1 ½ feet bgs, and may represent former product piping that connected the northern USTs to the former dispenser islands located near the eastern site boundary.

Three excavations were advanced along the southern site boundary, between the City of Kent concrete sidewalk and the asphalt-paved drive-thru. Two steel USTs approximately 38-inches in diameter were encountered at a depth of approximately two feet bgs in the two eastern excavations. Approximately 13-inches of water were measured in the easternmost tank. Based on the measured tank diameters, Terracon inferred that each tank had a capacity of approximately 300 gallons (later determined to be 500- to 550-gallon capacities). Both tanks extended to the south beneath the sidewalk. In the western excavation, a steel pipe was observed at a depth of approximately 1.5 feet bgs, and transected the excavation in a northeast to southwest orientation. Although no UST was found, Terracon inferred that an approximately 500-gallon tank associated with the observed steel pipe might be located beneath the sidewalk. The assumed tank capacity was based on Aerotech's historical site data that two 500-gallon USTs were in use at the site prior to 1953.

## 1.3 Scope of Work

Terracon's services were completed in accordance with our scope of services and cost estimate as outlined in our proposal (Terracon Proposal No. P81140078RRR), dated April 16, 2014, the Change Order to P81130257RRR dated June 3, 2014, and the Change Order to P81130257RRR dated June 6, 2014.

Our scope of services included completion of the following tasks:

Task 1. Notified Ecology 30 days prior to the planned UST closure work, and obtained required City of Kent permits. Mobilized to the site to provide project oversight, observation, and monitoring of activities associated with the permanent closure of the USTs.

Task 2. Visually inspected the USTs and excavations to assess for indications of a release.

Task 3. Collected compliance soil samples from the sides and ends of the USTs, in accordance with Washington State rules and regulations.

Task 4. Conducted soil excavation and in situ treatment as an Interim Action to address observed petroleum-contaminated soil (PCS) in the southern USTs excavation area.

Task 5. Completed laboratory analyses of the soil samples.

Task 6. Prepared this report summarizing the results of our findings, soil quality in the area of the USTs, and conclusions and recommendations for additional work, if any.

## 1.4 Project Objectives

The objectives of this project included providing project management and oversight of soil sampling activities associated with the removal of two (2) 5,000- to 6,000-gallon fuel USTs from the northeast portion of the site, the removal of three (3) 300- to 500-gallon USTs of undetermined usage from the southeast portion of the site, and the excavation and removal for offsite disposal of up to 55 tons of PCS near the southern USTs as a site interim action. One additional UST was discovered in the southern portion of the site, and one of the previously known USTs was discovered to be too close to the street for it to safely be removed. Vivolo Family LLC, c/o Union Bank as Trustee, authorized Terracon to remove the discovered UST and close the UST adjacent to the street in place using CDF. Based on soil sample analytical results indicating that a confirmed release had occurred from the southern USTs system, Vivolo Family LLC, c/o Union Bank as Trustee, requested that Terracon perform additional site remedial activity interim actions to excavate and remove for offsite disposal up to 120 additional tons of PCS and up to 1,000 gallons of petroleum-contaminated groundwater from the area of the southern USTs, and to apply up to 175 pounds of ORC-A® to the bottom of the soil excavation to treat soil and groundwater in situ.

## 1.5 Standard of Care

Terracon's services were performed in a manner consistent with generally accepted practices of the profession undertaken in similar studies in the same geographical area during the same time period. Please note that Terracon does not warrant the work of laboratories, regulatory agencies or other third parties supplying information used in the preparation of the report. Our services were performed in accordance with the scope of work agreed with you, our client, as reflected in our proposal and were not restricted by ASTM E1903-11.

## 1.6 Additional Scope Limitations

This report was intended to reduce, but not eliminate, uncertainty regarding the existence of recognized environmental conditions in connection with the subject site. Findings, conclusions and recommendations resulting from these services are based upon information derived from the on-site activities and other services performed under this scope of work; such information is subject to change over time. Certain indicators of the presence of hazardous substances, petroleum products, or other constituents may have been latent, inaccessible, unobservable, non-detectable or not present during these services, and we cannot represent that the site contains no hazardous substances, toxic materials, petroleum products, or other latent conditions beyond those identified during this project. Subsurface conditions may vary from those encountered at the time of construction or at specific borings or wells or during other surveys, tests, assessments, investigations or exploratory services. The data, interpretations, findings, and our recommendations are based solely upon data obtained at the time and within the scope of these services.

## 1.7 Reliance

This UST Decommissioning and Soil Interim Action Report is certified to, can be relied upon by, and has been prepared for the exclusive use of Vivolo Family LLC, c/o Union Bank as Trustee, and their respective successors, assigns, affiliates, and subsidiaries. Any authorization for use or reliance by any other party (except a governmental entity having jurisdiction over the site) is prohibited without the express written authorization of Vivolo Family LLC and Terracon. Any unauthorized distribution or reuse is at Vivolo Family Trust LLC c/o Union Bank as Trustee's sole risk. Notwithstanding the foregoing, reliance by authorized parties will be subject to the terms, conditions, and limitations stated in the proposal, UST decommissioning report, and the Master Environmental Services Agreement between Terracon and Union Bank, N.A. (UB) dated March 7, 2011.

# 2.0 UST DECOMMISIONING AND SOIL INTERIM ACTION

## 2.1 UST Removal Permits

Terracon applied for and obtained all necessary permits and documents required by the City of Kent and Ecology to complete the UST decommissioning/removal work. Copies of the permits and supporting documents are included in Appendix D. The planned excavation work to remove the USTs located along the southern site boundary required a City of Kent Street Use/Street Cut permit, and an associated Traffic Control Plan to close the southernmost lane of East Smith Street.

A State Environmental Policy Act (SEPA) application was required by the City of Kent because the total volume of the USTs scheduled for removal exceeded 10,000 gallons. The SEPA review process by the City of Kent took approximately 60 days, followed by a 14-day appeal period. At the time of the SEPA submittal, two signs were required to be placed along the street in front of the site at Central Avenue North and at East Smith Street. The signs remained onsite during the SEPA review process to notify the public of the proposed work, and were removed from the site at the end of the SEPA review process.

During the SEPA review process, the City of Kent determined that a Grading and Fill permit would be required for the UST removal project. The Grading and Fill permit application included a requirement for a Grading Plan and a Temporary Erosion and Sediment Control (TESC) Plan.

UST removal permits were required from the City of Kent Fire Marshall for the two northern USTs, and for the three anticipated USTs located along the southern site boundary. Terracon submitted a *30-Day Notice to Decommission a UST* to Ecology in October 2013, and provided Ecology with verbal updates in April and May 2014.

Terracon posted signs on temporary site fencing during the UST decommissioning and soil excavation work indicating that an interim remedial action was being conducted at the site. The signs were posted in order to comply with the public notice requirements for independent remedial actions described in WAC 173-340-545(3). Each sign identified contact persons and contact telephone numbers for members of the public to call for more information.

## 2.2 UST Decommissioning and Compliance Soil Sampling

The following sections describe the observations and compliance soil sampling conducted for decommissioning the northern USTs and the southern USTs. The USTs decommissioning and compliance soil sampling work was conducted between May 27, 2014 and June 5, 2014. The on-site Washington State UST Site Assessor was Michael D. Noll of Terracon (ICC Certification #879909). Copies of the Site Check/Site Assessment Checklist and the UST Closure Form are included in Appendix D.

Terracon conducted the fieldwork under a health and safety plan developed in accordance with 29 CFR 1910.120 for this project. Work was performed using Occupational Safety and Health Administration (OSHA) Level D work attire consisting of hard hats, safety glasses, protective gloves, and protective boots. Terracon's subcontracted UST removal and soil excavation contractor (IOEI) contacted the State of Washington Utility Notification Center and requested location and markings for all utilities that the service was responsible for before commencing intrusive activities at the site. In addition, Terracon subcontracted CNI Locating to locate and mark any potential private utilities which may have been present in the vicinity of the proposed excavation locations.

A required pre-construction meeting with the City of Kent was held at the City offices on May 22, 2014. IOEI and Evergreen Concrete Cutting completed all asphalt and concrete pavement cutting at the northern USTs area and the southern USTs area on May 23, 2014, and IOEI installed the storm water catch basin filter fabric required in the TESC. All pavement was left in place over the Memorial Day Holiday weekend, for public safety reasons. IOEI utilized a Komatsu PC 120 track-mounted hydraulic excavator, a Case 580L rubber-tired backhoe, and a Terex TC 75 rubber-track-mounted hydraulic mini-excavator to perform the UST closure and excavation backfill work.

### 2.2.1 Northern USTs Removals and Compliance Soil Sampling – Excavation 1

Terracon observed on May 23, 2014, that the northern fill port on the western 5,000-gallon UST did not have a cover or a cap on the fill pipe, and that the tank contained about 1.3 feet of fluid. A sample of the tank fluid was collected for observation purposes using a disposable polyvinyl chloride (PVC) bailer. The fluid sample was dark gray, contained some sediment and sheen, and had a strong gasoline-like odor.

IOEI set up temporary fencing and removed asphalt and concrete pavement from the tops of the northern USTs on May 27, 2014. The Komatsu excavator was used to excavate and remove the northern USTs. The asphalt measured approximately 4-inches thick, and was underlain by an approximately 6-inch thick concrete tank slab. A portion of the exposed aggregate concrete sidewalk overlying the tanks on the north side of the restaurant building was also removed. The asphalt and concrete debris was transported offsite to Renton Recycle for processing and disposal. Copies of the disposal documents are included in Appendix E.

The tops of the tanks were located at approximately 3 feet bgs. Both tanks were of steel construction, and were oriented north to south. The eastern UST contained a very small amount of fluid in the southern portion of the tank, but not enough for a sample to be collected using a disposable PVC bailer. A very strong gasoline-like odor was noted at the tank openings.

Two 2-inch diameter steel vent pipes were located at the south ends of both tanks, at approximately 2 feet bgs. The vent pipes were oriented northeast to southwest, and appeared to lead toward the northwest corner of the restaurant building, where two 2-inch diameter, vertical steel pipes were located. The vent pipes were removed from the tops of the tanks, cut off, and sealed with concrete mix at the southwest corner of the excavation. The vertical vent pipes at the northwest corner of the restaurant building were cut off at the top of the concrete sidewalk and sealed with concrete mix. Possible 1.5-inch to 2-inch diameter steel product supply lines oriented east to west were encountered in the southern portion of the excavation at approximately 2 to 2.5 feet bgs. The possible product supply lines were removed from the tops of the tanks, cut off at the southeast corner of the excavation, and sealed with concrete mix. All cut off piping was removed from the site for disposal or recycling.

A ¾-inch diameter iron conduit oriented southwest to northeast was observed at approximately 2 feet bgs in the eastern portion of the excavation. The conduit appeared to be connected to an unused electrical conduit located on the south side of the restaurant building about 5 feet west of the building entrance. A 1-inch diameter iron conduit oriented east to west was observed at approximately 2.5 feet bgs in the southern portion of the excavation. Both conduits were left in place in the excavation during the tank removal and excavation backfill process.

The northern USTs were pumped, rinsed, inerted, and removed on May 28, 2014. The on-site Washington State UST Supervisor was Scot Overdick of IOEI (ICC Certification #8178938). Copies of the UST Triple rinse Certificates prepared by IOEI are included in Appendix D. Marine Vacuum Service of Seattle (Mar Vac) pumped and rinsed the tanks using a vacuum truck and a pressure washer. Approximately 400 gallons of tank fluids and rinsate water were removed from the site for disposal at the Mar Vac treatment and disposal facility in Seattle (Appendix E). A marine chemist from Sound Testing in Tacoma inerted the tanks using pressurized carbon dioxide ($CO_2$) canisters, and provided tank inert certifications (Appendix D). The City of Kent Fire Marshall observed and checked the tank rinsing and inerting process, and authorized the removal of the USTs (Appendix D).

**Northern USTs Descriptions**

| Tank Number | Estimated Volume (Gallons) | Tank Dimensions (Feet) | Approximate Location (Figure 3) |
|---|---|---|---|
| 1 | 5,000 | 8 (diameter) by 14 | Western UST |
| 2 | 6,000 | 8 (diameter) by 16 | Eastern UST |

Both tanks were in good condition, with no apparent holes or pitting. Groundwater was observed entering the bottom of the UST removal excavation at approximately 7 feet bgs, and stabilized overnight at approximately 5 feet bgs. About 2 inches of water were observed in the bottom of the eastern UST after the tank was pumped and pressure washed. However, no holes were observed in the bottom of the tank. The tanks were loaded onto a low-boy truck

trailer and transported offsite to the Mar Vac facility in Seattle for cleaning and disposal (Appendix E).

The final extent of the northern USTs removal excavation (Excavation 1; Figure 3) measured approximately 21 feet long (north to south), 20 to 24 feet wide, and 6 to 7 feet deep. Soils encountered in Excavation 1 consisted of gray to brown sandy gravel crushed rock subgrade to approximately 1 foot bgs, underlain by brown gravelly sand to approximately 7 feet bgs. Gray gravelly sand with a slight to moderate hydrocarbon-like odor was observed at approximately 6.5 feet bgs between the two tanks, with the strongest odor observed in the soil excavated from the north (fill) end of the tanks. A sample of this soil (sample NSS-4, as described below) was submitted for laboratory analysis, and the results did not indicate a confirmed release from the USTs, as described in Section 3.0. Soil was not excavated below 7 feet bgs because the soil was saturated with groundwater and the sidewalls of the excavation began collapsing into the hole.

A total of 6 confirmation soil samples were collected from Excavation 1 and submitted for laboratory analysis. Soil samples were collected from the western UST north end (W5K-N-6), south end (W5K-S-5), and west sidewall (W5K-W-6); and from the eastern UST north end (E5K-N-6), south end (E5K-S-5), and east sidewall (E5K-E-5); at approximately 5 to 6 feet bgs. No samples were collected from beneath the tanks because the bottoms of the tanks (approximately 11 feet bgs) were located approximately 4 feet below the top of the groundwater table (approximately 7 feet bgs). Groundwater samples collected in the vicinity of the USTs by Terracon in October 2013 from borings B-1 through B-4 (Figure 2) did not contain concentration of TPH or VOCs exceeding the MTCA Method A cleanup levels. Approximate Excavation 1 sampling locations are noted on Figure 3 and Figure 4 of Appendix A.

In addition, three composite grab samples (NSS-1 through NSS-3) were collected from the inferred clean overburden soil excavated from above the tanks and stockpiled onsite for soil characterization. One additional composite soil sample (NSS-4) was collected from the gray soil removed from between the tanks at 6.5 to 7 feet bgs. Each sample container was labeled with the site name, date, time, and sample number. Sample containers were placed in a chilled cooler immediately after sampling, and subsequently transported to the analytical laboratory by a laboratory-contracted courier under strict chain-of-custody procedures.

A photoionization detector (PID) calibrated to 100 parts per million (ppm) isobutylene was used to field-screen the excavated soil for the presence of VOCs. The PID reading for the gray soil excavated from between the USTs ranged from 1.2 to 4.2 ppm. A small portion of each soil sample collected for laboratory analysis was placed in a sealable plastic bag, sealed, and allowed to equilibrate for several minutes. The bag was then opened slightly, the tip of the PID was inserted into the bag, and the headspace reading was observed and recorded in the field notebook. Headspace PID readings for the compliance soil samples collected at the ends and

sidewalls of the USTs, and from soil stockpile samples NSS-1 through NSS-3, ranged from 0 to 0.1 ppm. The headspace PID reading for sample NSS-4 was 14.9 ppm.

Excavation 1 was left open overnight, pending receipt of soil sample laboratory analytical results. Measured depth to groundwater in the bottom of the excavation on May 29, 2014, was approximately 5 feet bgs. Mar Vac returned to the site and pumped approximately 450 gallons of water from the excavation for offsite disposal at their Seattle facility (Appendix E).

Once the soil sample laboratory analytical results were obtained, as discussed below in Section 2.4.1, Excavation 1 was backfilled and compacted on May 29 and 30, 2014. Approximately 10 cubic yards ($yds^3$) of 8- to 12-inch quarry spall rocks were set in the bottom of the excavation at 5 to 6 feet bgs. A layer of filter fabric was placed on top of the quarry spalls, and stockpiled soil from the excavation was placed on top of the filter fabric and compacted in 12- to 18-inch lifts using a hoepack hydraulic vibratory compactor installed on the Case backhoe. All stockpiled soil from the excavation was used as fill. Five loads (approximately 50 $yds^3$) of clean Type 17 sandy gravel fill were placed into the excavation, spread, and compacted. Two loads (approximately 20 $yds^3$) of clean 5/8-inch minus crushed rock fill were placed at the top of the excavation, spread, and compacted. The crushed rock fill was left at grade so the site entrance and parking lot could be opened for the weekend. The northern USTs excavation area was paved by AC Paving Northwest, Inc. (AC Paving) with 3-inch thick hot asphalt on June 3, 2014.

### 2.2.2 Southern USTs Closures and Compliance Soil Sampling – Excavation 2

IOEI set up temporary fencing and removed the concrete sidewalk above the tops of the southern USTs on June 2, 2014. The Terex mini-excavator was used to excavate and remove the southern USTs. The concrete sidewalk measured approximately 5 to 6 inches thick. The concrete debris was transported offsite to Renton Recycle for processing and disposal (Appendix E).

**Southern USTs Descriptions**

| Tank Number | Estimated Volume (Gallons) | Tank Dimensions (Feet) | Approximate Location (Figure 3) |
|---|---|---|---|
| 3 | 500 | 3.5 (diameter) by 7.3 | East Tank |
| 4 | 550 | 4 (diameter) by 6 | Central Tank |
| 5 | 875 | 3.6 (diameter) by 11.5 | West Tank |
| 6 | 800 | 4 (diameter) by 8.5 | Northwest Tank |

The tops of the easternmost tanks were located at approximately 2.5 feet bgs. Both tanks were of thin-walled steel construction, and were oriented north to south. The East Tank contained approximately 1.3 feet of fluid. A sample of the tank fluid (sample E300 Liquid) was collected using a disposable PVC bailer and transferred into a 500-milliliter (ml) amber glass container. The Central Tank was dry, but had a strong hydrocarbon-like odor. PID readings of 235 ppm

and 600 ppm were measured in the tank openings of the East Tank and Central Tank, respectively.

A concrete slab measuring approximately 6 feet long east to west, 4 feet wide, and 4 to 6 inches thick was encountered at approximately 2 feet bgs in the area where the westernmost tank was anticipated. The top of the western UST (West Tank) was encountered at approximately 2.5 feet bgs, directly below the concrete slab. A second UST (Northwest Tank) was encountered at approximately 2.5 feet bgs, approximately 2 feet north of the West Tank. Both tanks were of steel construction, and were oriented east to west. The West Tank contained approximately 0.3 feet of fluid. A sample of the tank fluid (WTank Liquid) was collected using a disposable PVC bailer and transferred into a 500-ml amber glass container. The Northwest Tank contained approximately 1-inch of fluid with a strong gasoline-like odor.

An approximately 1.5-inch diameter steel pipe (possible product supply line) oriented northeast to southwest was encountered at the north end of the East Tank at approximately 2 feet bgs. A 2-inch diameter iron product supply line oriented east to west was encountered at the north end of the Central Tank at approximately 2 feet bgs. The 2-inch pipe contained about ½-gallon of fluid with no hydrocarbon-like odor or sheen, which spilled into the excavation when the pipe was inadvertently struck by the excavator bucket. A 4-inch diameter concrete drain pipe oriented north to south and a 5-inch diameter concrete drain pipe oriented northeast to southwest were encountered at 2.5 feet bgs at the Northwest Tank. The 4-inch diameter pipe was completely full of black, organic-rich sediment with no odor. The product supply lines were removed from the tops of the tanks and cut off at the northeast corner of the excavation. All cut off piping and concrete drain pipe sections were removed from the site for disposal or recycling.

The southern USTs were pumped and rinsed on June 3, 2014 (Appendix D). Mar Vac pumped and rinsed the tanks using a vacuum truck and a pressure washer. A total of approximately 650 gallons of tank fluids and rinsate water were disposed of offsite at the Mar Vac disposal facility in Seattle (Appendix E). A Sound Testing marine chemist inerted the USTs on June 3, 2014, using pressurized $CO_2$ canisters, and provided tank inert certifications (Appendix D). The City of Kent Fire Marshall observed and checked the tank rinsing and inerting process, and authorized the UST removals (Appendix D).

The south edge of the West Tank is located approximately 1.5 feet north of the East Smith Street roadway, and the bottom of the tank is located approximately 6.5 feet bgs. Due to the close proximity of the West Tank to the City of Kent ROW, and because the bottom of the tank is below the top of the groundwater table, Terracon requested approval from the City of Kent to decommission the West Tank in place using controlled density fill (CDF) to prevent the roadway from being undermined by loose soil sloughing into the excavation during the removal of the West Tank. Terracon received approval from the City of Kent Public Works Department and the Fire Marshall to close the West Tank in place using CDF. Vivolo Family LLC, c/o Union Bank as

Trustee, approved a change order request from Terracon to remove the discovered Northwest Tank and to close the West Tank in place using CDF.

The East Tank, Central Tank, and Northwest Tank were removed on June 3 and 4, 2014. All three tanks were rusted and pitted, and had several holes in the tank ends and/or bottoms. The tanks were loaded onto a flatbed truck and transported to Mar Vac in Seattle for cleaning and disposal (Appendix E). The West Tank was closed-in-place on June 4, 2014, using CDF. Two holes approximately 1-foot by 1-foot were cut into the top of the tank and the tank was inspected. No holes or water were observed in the bottom of the tank. CDF was placed into the tank using a concrete chute and spread throughout the tank cavity using push poles. The tank and all openings were topped off with CDF.

The final extent of the southern USTs removal excavation (Excavation 2; Figure 3) measured approximately 40 feet long (east to west), 12 to 15 feet wide, and 6 to 7 feet deep. Soils encountered in Excavation 2 consisted of gray to brown sandy gravel crushed rock subgrade beneath the City of Kent concrete sidewalk to approximately 1 foot bgs, underlain by brown to gray silty sand and sandy silt with gravel to approximately 6 feet bgs. Gray silty sand with a strong to moderate hydrocarbon-like odor was observed from approximately 2 to 7 feet bgs in the eastern and northeastern portions of the excavation, principally in the vicinity of the East Tank and Central Tank and the area northeast of the two tanks where the steel/iron possible former product lines were observed. PID readings in the gray soil ranged from 10 to 877 ppm, with the majority of the PID readings exceeding 100 ppm. Soil was not excavated below approximately 6 to 7 feet bgs because the soil was saturated with groundwater and the sidewalls of the excavation began collapsing into the hole.

A total of 15 confirmation soil samples were collected from Excavation 2 and submitted for laboratory analysis. Soil samples were collected from below the East Tank (ETank-Bot-5), south end (ETank-S-5), east sidewall (ETank-E-5), northeast sidewall (ETank-NE-4), and north end (ETank-N-4) at approximately 4 to 5 feet bgs. Soil samples were collected from the Central Tank north end (CTank-N-6), south end (CTank-S-4.5), and west sidewall (CTank-W-4.5) at approximately 4.5 to 5 feet bgs. Soil samples were collected from the West Tank west end (WTank-W-4.5), east end (WTank-E-4), and south sidewall (WTank-S-4.5) at approximately 4 to 4.5 feet bgs. Soil samples were collected from the Northwest Tank north sidewall (NWTank-N-7), west end (NWTank-W-6.5), below the tank (NWTank-Bot-7), and east end (NWTank-E-5.5) at approximately 5.5 to 7 feet bgs. The bottoms of the tanks (approximately 6.5 feet bgs) were at the top of the groundwater table, so no samples were collected from beneath the Central Tank or the West Tank. A groundwater sample collected by Terracon in October 2013 from boring B-7, located in the vicinity of the West Tank and Northwest Tank, did not contain concentrations of TPH or VOCs exceeding the MTCA Method A cleanup levels. Approximate Excavation 2 sampling locations are noted on Figure 3 and Figure 5 of Appendix A.

Three composite grab samples (SSS-1, SSS-2, and SSS-4) were collected from the inferred clean overburden soil excavated from the tops of the southern USTs and stockpiled onsite for soil characterization. Each sample container was labeled with the site name, date, time, and sample number. Sample containers were placed in a chilled cooler immediately after sampling, and subsequently transported to the analytical laboratory by a laboratory-contracted courier under strict chain-of-custody procedures.

Headspace PID readings for the compliance soil samples collected at the ends and sidewalls of the West Tank and Northwest Tank, and from soil stockpile samples SSS-1, SSS-2, and SSS-4, ranged from 0 to 5.8 ppm. Headspace PID readings for the compliance soil samples collected at the ends and sidewalls of the East Tank and Central Tank ranged from 10.7 to 714 ppm. The headspace PID reading for the soil sample collected beneath the Northwest Tank at 7 feet bgs was 390 ppm. Additional PCS to the south and east of the East Tank and the Central Tank was not removed from Excavation 2 due to the presence of East Smith Street (to the south) and a catch basin (to the east). Based on the PID readings and laboratory sample results (discussed below in Section 2.4), approximately 42 tons of PCS from Excavation 2 were disposed of at an offsite treatment and disposal facility, as described below.

Terracon and IOEI submitted site soil data to the CEMEX soil thermal treatment facility in Everett, Washington, for the disposal of PCS from the site. Two truck and transfer loads of PCS (42.37 tons) were transported to the CEMEX Everett facility on June 3 and 4, 2014 (Appendix E).

Based on PID readings and laboratory analytical results, additional PCS remained in place in the asphalt-paved drive-thru area north of the East Tank and Central Tank. Two test pits (TP-1 and TP-2) were excavated in the drive-thru area on June 4, 2014 (Figure 3). The purpose of the test pits was to collect PID readings in the soil to determine the potential extent of PCS north of the East Tank and Central Tank, and to further investigate the potential soil impacts from the possible former product lines.

TP-1 was advanced approximately 5 feet north of the drive-thru south asphalt curb, to a depth of approximately 3 feet bgs. PID readings in the grayish-brown sandy silt encountered at 2 to 2.5 feet bgs ranged from 240 to 940 ppm. TP-1 was backfilled with the excavated soil and topped with 5/8-inch minus crushed rock to grade. TP-2 was advanced approximately 5 feet east of the southeast corner of the restaurant building, to a depth of approximately 5 feet bgs. Soils encountered in TP-2 included yellowish-brown silty sand, gray-brown sandy silt, and brown silty sand with no odor to approximately 4.9 feet bgs. The PID reading in the gray silty sand encountered at 4.9 to 5 feet bgs was 290 ppm. TP-2 was backfilled with the excavated soil and topped with 5/8-inch minus crushed rock to grade.

During the excavation of PCS from the bottom of the excavation (approximately 6 to 7 feet bgs), groundwater with a heavy sheen was observed streaming into the eastern (deepest) portion of

the excavation from the approximate location of the Central Tank. Excavation 2 was left open overnight, to the extent possible, so petroleum-contaminated groundwater could be pumped from the excavation prior to backfilling. IOEI placed stockpiled soil along the north excavation wall, and 5/8-inch minus crushed rock along the south excavation wall to prevent further caving. Measured depth to groundwater in the bottom of the excavation on June 5, 2014, was approximately 5 feet bgs. A heavy sheen was observed on the surface of the ponded water. Mar Vac pumped approximately 200 gallons of water and 200 gallons of mud from the excavation for disposal at their Seattle facility (Appendix E).

Excavation 2 was backfilled and compacted on June 5, 2014. Black plastic sheeting was placed on the north and east sidewall in the northeast corner of the excavation to mark the location of the PCS left in place. Approximately 35 $yds^3$ of clean Type 17 sandy gravel fill and 15 $yds^3$ of stockpiled soil were placed into the excavation, spread, and compacted in 12- to 18-inch lifts using the hoepack. All "clean" stockpiled soil from the excavation was used as fill in the landscape area. Fill material in the sidewalk area consisted of Type 17 fill, topped with 1 to 1.5 feet of 5/8-inch minus crushed rock fill. As directed by the City of Kent, the crushed rock fill was left at subgrade level for the concrete sidewalk pour with a 1:12 slope at each end and topped with asphalt cold patch so the sidewalk could be opened for pedestrian and wheelchair traffic over the weekend. In addition, test pit locations TP-1 and TP-2 were repaired using cold patch asphalt.

The City of Kent sidewalk was framed and poured on June 9, 2014, by Pacific Concrete. The sidewalk was restored with 5-inch thick concrete. The City of Kent inspector approved the sidewalk pour and finishing work. Pacific Concrete also replaced the section of exposed aggregate concrete sidewalk at the northeast corner of the restaurant building.

### 2.2.3 Additional PCS Removal and Excavation Soil Sampling – Excavation 3

Based on the test pit PID field-screening results, the October 2013 soil boring results, and the laboratory analytical results from Excavation 2, Terracon estimated that an additional 80 $yds^3$ (approximately 120 tons) of accessible PCS likely remained onsite to the north of the limits of Excavation 2. On June 9, 2014, Vivolo Family LLC, c/o Union Bank as Trustee, authorized Terracon and IOEI to excavate and dispose of up to 120 additional tons of PCS from the drive-thru area, pump groundwater from the excavation, install up to 175 pounds of ORC-A® in the excavation, place imported fill material within the excavation, and restore the asphalt pavement.

Terracon and IOEI removed asphalt pavement and excavated PCS in the drive-thru area on June 10 and 11, 2014. The asphalt debris was transported offsite to Renton Recycle for disposal (Appendix E). A concrete slab approximately 7 feet wide and 6-inches thick was encountered beneath the asphalt pavement on the west end of the excavation (Excavation 3; Figure 3). Two 2-inch iron pipes (possible former product lines) oriented northeast to southwest

were encountered at the west end of Excavation 3 at approximately 2 feet bgs. The pipes appeared to extend toward the West Tank and Northwest Tank. The pipes contained fluid, which Mar Vac removed from the pipes on June 11, 2014. IOEI cut and removed the pipes from the excavation and disposed of them offsite.

An approximately ¾-inch diameter electrical conduit oriented northwest to southeast was encountered directly below the asphalt pavement near the southeast corner of the restaurant building. The conduit appeared to provide electrical power to the business sign located at the southeast corner of the site, and was inadvertently broken while peeling up the asphalt pavement. The electrical circuit was temporarily isolated, and the conduit was repaired by Kiethly Electric on June 12, 2014. A 2-inch diameter PVC pipe oriented east to west was encountered at the north end of the excavation at approximately 1 foot bgs. The pipe supplies water to the landscaping irrigation system, and was inadvertently cracked by heavy trucks driving over it. IOEI repaired the pipe and verified the sprinkler system was in working order. Three ¾-inch to 1-inch diameter pipes oriented east to west were encountered at 3 feet bgs near the southeast corner of the restaurant building.

Seven truckloads of PCS (83.93 tons) were transported offsite for treatment and disposal at the CEMEX Everett facility between June 10 and 12, 2014 (Appendix E). Measured depth to groundwater in the bottom of the excavation on June 10, 2014, was approximately 5.5 to 6 feet bgs. A petroleum sheen was observed on the surface of the ponded water. Mar Vac pumped approximately 175 gallons of water from Excavation 3 for offsite disposal at their Seattle facility (Appendix E).

The final extent of the J-shaped PCS removal excavation (Excavation 3) measured approximately 40 feet long (northeast to southwest), 12 to 15 feet wide, and 6 feet deep. Soils encountered in the PCS removal excavation consisted of gray to brown sandy gravel crushed rock subgrade beneath the asphalt pavement to approximately 1 foot bgs, underlain by brown to gray silty sand and sandy silt with gravel to approximately 6 feet bgs. Gray silty sand with a strong to moderate hydrocarbon-like odor was observed from approximately 1 to 6 feet bgs in the western and southeastern portion of the excavation, principally in the area north of the East Tank and Central Tank and the area where the two 2-inch diameter iron pipes/former product lines were observed. PID readings in the gray soil ranged from 105 to 1,500 ppm, with the majority of the PID readings exceeding 1,000 ppm. The soil excavation was halted at the north end of the excavation when PID readings dropped below 1 ppm. Soil was not excavated below approximately 6 to 7 feet bgs because the soil was saturated with groundwater and the sidewalls of the excavation could have potentially collapsed into the hole, possibly undermining the building, the previously excavated area to the south (Excavation 2), the concrete catch basin to the southeast, or the landscaped area and concrete sidewalk to the east. Additional PCS was not excavated to the west due to the presence of the restaurant building and the buried concrete slab of unknown length located near the south entrance to the restaurant building.

Additional PCS was not excavated to the east or southeast due to the presence of Central Avenue North and a concrete catch basin.

A total of 11 confirmation soil samples were collected from the sidewalls of Excavation 3 and submitted for laboratory analysis. Soil samples were collected from the excavation west end (WW1-5.5 and WW2-5.5), southeast sidewall (SE1-5.5), northwest sidewall (NW1-5.5, NW2-5.5, and NW3-5.5), east sidewall (E1-5.5, E2-5.5, and E3-5.5), and north end (N1-5.5 and N2-5.5) at approximately 5.5 feet bgs. Headspace PID readings for the soil samples collected at the final extent of the excavation ranged from 0 to 1,541 ppm, with the highest PID readings (273 to 1,541 ppm) measured in the samples collected from the west, northwest, and southeast excavation sidewalls. Approximate Excavation 3 sampling locations are noted on Figure 3 and Figure 5 of Appendix A.

In addition, one composite grab sample (SSS-5) was collected from the inferred clean overburden soil excavated from above the PCS and stockpiled onsite for soil characterization. One PCS soil sample (EXP1-4.5) was also collected for analysis to confirm the PID readings. Each sample container was labeled with the site name, date, time, and sample number. Sample containers were placed in a chilled cooler immediately after sampling, and subsequently shipped to the analytical laboratory by Terracon under strict chain-of-custody procedures.

Once the soil sample laboratory analytical results were obtained, as discussed below in Section 2.4.1, Excavation 3 was backfilled and compacted on June 11 and 12, 2014. Approximately 175 pounds of ORC-A® powder were applied to and mixed with soils in the base of the excavation prior to backfilling. Approximately 20 $yds^3$ of 2- to 4-inch quarry spall rocks were set in the bottom of the excavation at 5 to 6 feet bgs. A layer of filter fabric was placed on top of the quarry spalls, and stockpiled soil from the excavation was placed on top of the filter fabric. All "clean" overburden stockpiled soil from the excavation was used onsite as fill. Four loads (approximately 40 $yds^3$) of clean Type 17 sandy gravel fill were placed into the excavation, spread, and compacted in 12-inch lifts using the hoepack hydraulic vibratory compactor installed on the Case backhoe. One load (approximately 10 $yds^3$) of clean 5/8-inch minus crushed rock fill was placed at the top of the excavation, spread, and compacted. The drive-thru area was paved by AC Paving with 3-inch thick hot asphalt on June 13, 2014.

## 2.3 Analytical Laboratory Testing

Soil samples were placed into laboratory-provided glassware, and immediately placed into a cooler containing ice. Samples were delivered to a Washington State-accredited analytical laboratory in strict accordance with the industry standard chain-of-custody protocol. Each sample container was labeled with the site name, date, time, and sample number. Sample containers were placed in a chilled cooler immediately after sampling, and subsequently shipped to the analytical laboratory by Terracon under strict chain-of-custody procedures.

Based field observations (i.e., elevated PID readings) and rush sample results, all of the site USTs appeared to have been used for the storage of gasoline. Therefore, all soil samples were analyzed for gasoline-range TPH and BTEX via Northwest Method NWTPH-Gx. In order to verify that additional petroleum products of concern had not been released to the site soil from the USTs, all soil samples were also analyzed for diesel- and oil-range TPH via Northwest Method NWTPH-Dx. One soil stockpile sample (NSS-4) collected from Excavation 1 was also analyzed for total lead via EPA Method 6010C and polycyclic aromatic hydrocarbons (PAHs) via EPA Method 8260 with selected ion monitoring (SIM). The executed chain-of-custody forms and laboratory analytical certificates are provided in Appendix F.

## 2.4 Analytical Laboratory Results

Soil quality summary results are presented in Table 1 through Table 3 (Appendix B), and on Figure 4 and Figure 5 in Appendix A. The complete laboratory reports and chain-of-custody forms are included in Appendix F. Additional discussion and interpretation of analytical results relative to applicable cleanup levels is included in Section 3.0.

### 2.4.1 Northern USTs Area Soil Sampling Results - Excavation 1

Based on our site observations and soil analytical results, gasoline-, diesel-, and oil-range TPH and BTEX were not detected in any of the compliance or stockpiled clean overburden soil samples collected from the northern USTs area. Low concentrations of petroleum hydrocarbon impacts (gasoline-range TPH, oil-range TPH, and PAHs) and lead were identified in soil stockpile sample NSS-4; however, none of the concentrations exceeded the MTCA Method A cleanup level for soils established under Chapter 70.105D RCW and its implementing regulation, MTCA Chapter 173-340 WAC.

Given that no petroleum hydrocarbon impacts were detected in the soils at concentrations exceeding the MTCA Method A cleanup levels, the stockpiled soils were used as backfill into the excavation, subject to the earthwork recommendations contained in Terracon's May 2014 *Geotechnical Backfilling Recommendations* memorandum. Terracon was onsite during the excavation backfill and compaction work, as documented in our *Geotechnical Final Grading Report*, dated June 26, 2014.

### 2.4.2 Southern USTs Area Soil Sampling Results - Excavation 2

Based on our site observations and soil analytical results, gasoline-range TPH, benzene, ethylbenzene, and/or xylenes were detected at concentrations exceeding the MTCA Method A cleanup level for soils in eight compliance sampling locations in the area of the East Tank, Central Tank, and below the Northwestern Tank. In addition, stockpiled PCS contained gasoline-range TPH and/or benzene at concentrations exceeding the MTCA Method A cleanup

level for soils. The PCS (approximately 42.37 tons) was removed from the site for treatment and disposal.

Low concentrations of petroleum hydrocarbon impacts (diesel-range TPH and/or oil-range TPH) were identified in the "clean" overburden soil stockpile samples (SSS-1, SSS-2, and SSS-4); however, none of the concentrations exceeded the MTCA Method A cleanup level for soils. The "clean" stockpiled soils were used as backfill into the southern UST removal excavation.

### 2.4.3 Additional PCS Removal Area Soil Sampling Results - Excavation 3

Based on our site observations and soil analytical results, gasoline-range TPH, benzene, ethylbenzene, and/or xylenes were detected at concentrations exceeding the MTCA Method A cleanup level for soils at six sampling locations at the final extents of the PCS removal excavation, in the west, northwest, east, and southeast excavation sidewalls. In addition, stockpiled PCS contained gasoline-range TPH and benzene at concentrations exceeding the MTCA Method A cleanup level for soils. The PCS (approximately 83.93 tons) was removed from the site for treatment and disposal. Although PCS remained present in the sidewall samples, additional PCS could not be removed to the east, southeast, northwest, or west due to the presence of Central Avenue North (to the east), a catch basin (to the southeast), and a buried concrete structure and the restaurant building (to the northwest and west).

Low concentrations of petroleum hydrocarbon impacts (oil-range TPH) were identified in the "clean" overburden soil stockpile sample (SSS-5); however, none of the concentrations exceeded the MTCA Method A cleanup level for soils. The "clean" stockpiled soils were used as backfill into the PCS removal excavation.

## 2.5 Quality Assurance/Quality Control Results

The analytical results for the current investigation were checked for completeness immediately upon receipt from the laboratory to ensure that data and QA/QC information requested were present. Data quality was assessed by considering hold times, surrogate recovery, method blanks, matrix spike and matrix spike duplicate (MS/MSD) recovery, and detection limits. QA/QC review was completed using guidance described in *USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review* (Draft Final, USEPA, 2005). Our evaluation assumes that the QA/QC is correct as reported by the laboratory, and merely provides an interpretation of the QA/QC results.

Hold Times. Analyses were completed within specified hold times.

Surrogate Recoveries. Surrogate recoveries were within laboratory limits.

Method Blanks. Analytes were not detected in the laboratory method blanks.

MS/MSD Results. MS and MSD recoveries were all within laboratory limits, and Relative Percent Differences (RPDs) between MS and MSD recoveries were all within laboratory limits.

Laboratory Reporting Limits. Reporting limits were below relevant MTCA cleanup levels.

Based upon our interpretation of quality control information provided by the laboratory, it is our opinion that the overall dataset is useable as qualified for the purposes of this report.

## 3.0 FINDINGS AND DISCUSSION

Terracon has completed this UST Decommissioning and Soil Interim Action Report in support of documenting the removal of five USTs, closure-in-place decommissioning of one UST, removal and offsite disposal of approximately 126 tons of PCS and 575 gallons of petroleum-impacted groundwater, and application of 175 pounds of ORC-A® powder to treat petroleum-impacted soil and groundwater in situ at the site.

The findings of this report are as follows:

**Excavation 1**

- Two fuel USTs (one 5,000-gallon and one 6,000-gallon tank) were removed from the northern portion of the site, and three USTs (one 500-gallon, one 550-gallon, and one 800-gallon tank) were removed from the southeastern portion of the site. Based on its proximity to East Smith Street, an 875-gallon UST located in the southeastern portion of the site was closed in place by filling it with an inert substance (CDF), in accordance with local and state regulations.
- All compliance soil sample analytical results for the northern UST area (Excavation 1) were reported as non-detect.
- Gasoline-range TPH (7.9 milligrams per kilogram [mg/kg]), oil-range TPH (290 mg/kg), and lead (19 mg/kg) were identified in Excavation 1 soil stockpile sample NSS-4 at concentrations well below the MTCA Method A cleanup levels (30 mg/kg [when benzene is present], 2,000 mg/kg, and 250 mg/kg, respectively).
- A total of 16 PAHs were detected in sample NSS-4, ranging from 0.012 mg/kg of acenaphthene to 0.25 mg/kg of naphthalene (Table 2). All PAHs concentrations were below their respective MTCA Method A or Method B cleanup levels.
- Six cPAHs were detected in sample NSS-4, ranging from 0.020 mg/kg of indeno(1,2,3-cd)pyrene to 0.050 mg/kg of chrysene (Table 3). The total cPAHs reported in sample NSS-4, adjusted for the constituent toxicity equivalency factors listed in MTCA, was 0.045 mg/kg, well below the MTCA Method A cleanup level (0.1 mg/kg).
- The total naphthalenes (naphthalene, 1-methylnaphthalene, and 2-methylnaphthalene) concentration in sample NSS-4 (0.44 mg/kg) was well below the MTCA Method A cleanup level (5 mg/kg).
- Excavation 1 was backfilled using stockpiled soil and clean imported fill, compacted, and re-surfaced with asphalt pavement.

**Excavation 2**

- During compliance soil sampling in the southern UST area (Excavation 2), strong petroleum odors, staining, and elevated PID readings were noted in the collected samples.
- Gasoline-range TPH was identified at concentrations ranging from 130 mg/kg to 8,300 mg/kg in eight compliance soil samples and two PCS soil stockpile samples collected from Excavation 2. These concentrations are above the MTCA Method A cleanup level of 30 mg/kg.
- Benzene was identified at concentrations ranging from 0.057 mg/kg to 0.43 mg/kg in six compliance soil samples and one PCS soil stockpile sample collected from Excavation 2. These concentrations are above the MTCA Method A cleanup level of 0.03 mg/kg.
- Ethylbenzene was identified at concentrations ranging from 7.2 mg/kg to 22 mg/kg in three compliance soil samples collected from Excavation 2. These concentrations are above the MTCA Method A cleanup level of 6 mg/kg.
- Xylenes were identified at concentrations of 10 mg/kg and 22 mg/kg in two compliance soil samples collected from Excavation 2. These concentrations are above the MTCA Method A cleanup level of 9 mg/kg.
- All other compliance and stockpile soil sample analytical results for Excavation 2 were either reported as non-detect, or were below the MTCA Method A cleanup level.
- Approximately 42.37 tons of PCS were removed from the excavation and disposed of offsite.
- PCS remains in the southeast portion of the excavation; additional PCS but could not be excavated to the south or east due to the presence of East Smith Street (to the south) and a catch basin (to the east).
- Approximately 400 gallons of petroleum-contaminated groundwater and mud were pumped from excavation and disposed of offsite.
- Excavation 2 was backfilled using stockpiled soil and clean imported fill, compacted, and re-surfaced with concrete pavement in the sidewalk area, and resodded in the landscaped area.

**Excavation 3**

- Additional PCS was excavated and removed from the restaurant drive-thru area located north of the southern USTs area (Excavation 3).
- Gasoline-range TPH were identified at concentrations ranging from 1,300 mg/kg to 6,100 mg/kg in six sidewall soil samples and one PCS stockpile sample collected from

Excavation 3. These concentrations are above the MTCA Method A cleanup level of 30 mg/kg.

- Benzene was identified at concentrations ranging from 0.063 mg/kg to 0.43 mg/kg in six sidewall soil samples and one PCS stockpile sample collected from Excavation 3. These concentrations are above the MTCA Method A cleanup level of 0.03 mg/kg.
- Ethylbenzene was identified at concentrations ranging from 9.1 mg/kg to 10 mg/kg in three sidewall soil samples collected from Excavation 3. These concentrations are above the MTCA Method A cleanup level of 6 mg/kg.
- Xylenes were identified at concentrations ranging from 10 mg/kg to 12 mg/kg in three sidewall soil samples collected from Excavation 3. These concentrations are above the MTCA Method A cleanup level of 9 mg/kg.
- Approximately 83.93 tons of PCS were removed from the excavation and disposed of offsite.
- PCS remains in portions of the west, northwest, southeast, and east sidewalls of the excavation; additional PCS could not be excavated due to the presence of the restaurant building and a buried concrete structure (to the west and northwest), Central Avenue North (to the east), and a catch basin (to the southeast).
- Approximately 175 gallons of petroleum-contaminated groundwater and mud were pumped from excavation and disposed of offsite.
- Approximately 175 pounds of ORC were applied to the soil at the base of the excavation.
- Excavation 3 was backfilled using stockpiled soil and clean imported fill, compacted, and re-surfaced with asphalt pavement.
- All other compliance and stockpile soil sample analytical results for Excavation 3 were either reported as non-detect, or were below the MTCA Method A cleanup level.
- Detectable diesel-range TPH concentrations (28 mg/kg and 100 mg/kg, respectively) were identified in one Excavation 2 soil stockpile sample and one Excavation 3 sidewall sample. These concentrations are well below the MTCA Method A cleanup level (2,000 mg/kg).
- Detectable oil-range TPH (66 mg/kg to 290 mg/kg) was identified in eight Excavation 2 compliance soil and stockpile samples and one Excavation 3 soil stockpile sample. These concentrations are well below the MTCA Method A cleanup level (2,000 mg/kg).

Based on the analytical results, soil impacts identified above MTCA Method A cleanup levels were detected in samples collected from the southeastern portion of the site (Excavation 1 and Excavation 2). Soil impacts above cleanup levels consist of gasoline-range TPH, benzene, ethylbenzene, and xylenes. Terracon reported to Ecology on June 5, 2014, a confirmed release

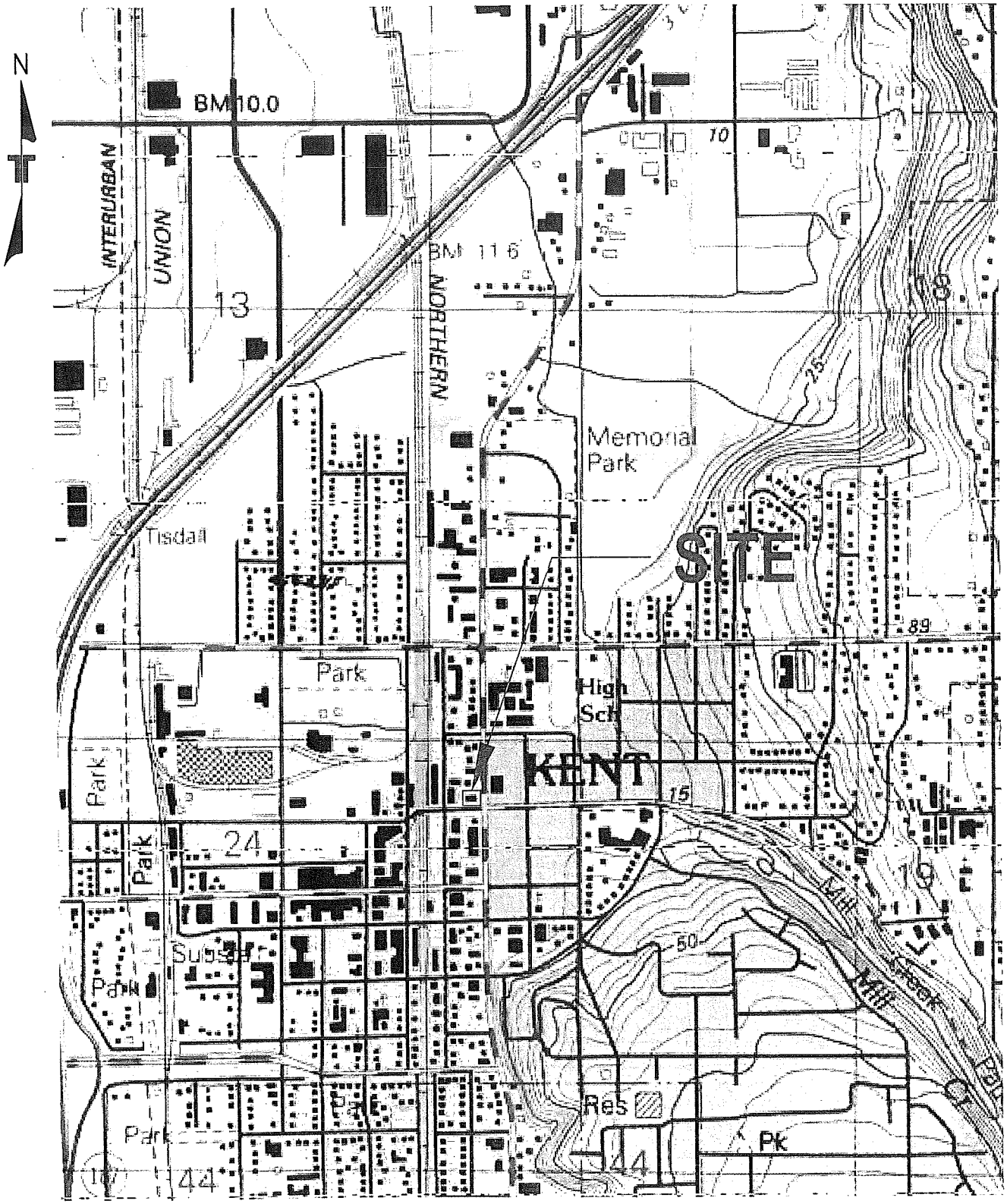
of gasoline-range TPH, benzene, ethylbenzene, and xylenes to the site soil. Ecology entered the report into the Environmental Report Tracking System (ERTS) as number 649246. Based on field observation and the soil sample laboratory analytical results, the release from the UST system at the southeast portion of the site appears to have been from the former product lines associated with the USTs, and possibly from holes observed in the East Tank, Central Tank, and Northwest Tank.

Based on the results of the soil samples collected from Excavation 2, Excavation 3, and October 2013 boring B-7, it appears that the gasoline-range TPH and BTEX impacts are limited to the area of the Northwest Tank, and to the north of the southeast corner of the restaurant building (area of Excavation 3 sidewall samples N1-5.5, N2-5.5, NW3-5.5, E2-5.5, and E3-5.5), due to the reported concentrations below cleanup levels. The limits of impacts to the east of the East Tank compliance samples and Excavation 3 sidewall samples SE1-5.5 and E1-5.5 are undetermined. The limits of impacts to the south of the East Tank and Central Tank compliance samples (into the City of Kent East Smith Street ROW) are undetermined. The limits of impacts to the north of Excavation 3 sidewall samples WW2-5.5, NW1-5.5, and NW2-5.5 are undetermined.

All accessible PCS was removed from the site to the maximum extent practicable. Additional PCS could not be removed due the presence of East Smith Street to the south, the restaurant building and a buried concrete structure to the west and northwest, Central Avenue North to the east, and a catch basin to the southeast.

# 4.0 RECOMMENDATIONS

Based on our field observations and analytical laboratory results, additional site characterization work associated with a confirmed release from the former UST system appears to be warranted. A copy of this report will be submitted to The Washington Department of Ecology Underground Storage Tank Section and the Northwest Regional Office, as required under MTCA Chapter 173-360 WAC.

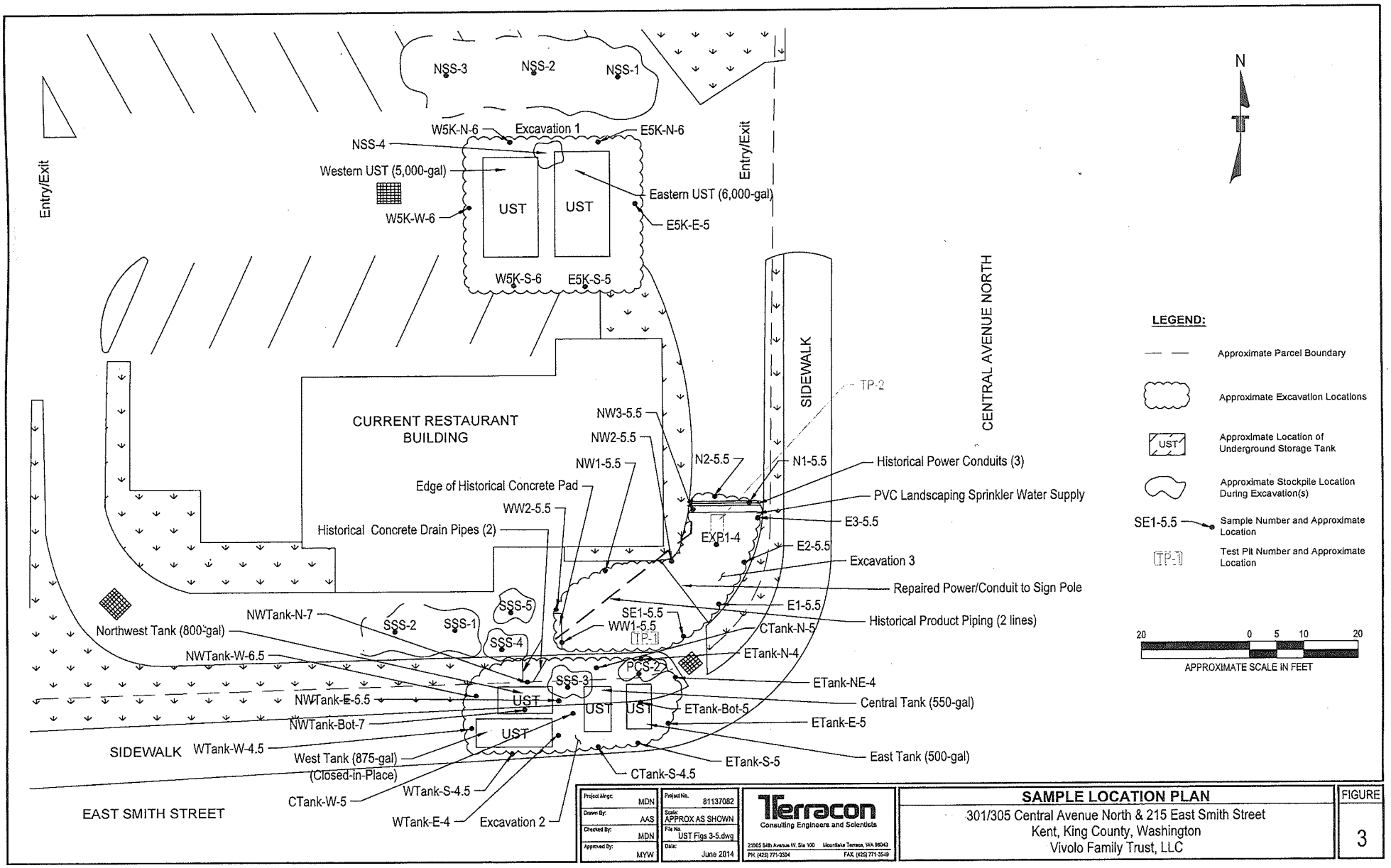



**LEGEND:**

Approximate site boundary

USGS Topographic Map,Renton Quadrangle, 1994

| | | | | |
|---|---|---|---|---|
| Project Mngr: MDN | Project No. 81137082 | Terracon Consulting Engineers and Scientists | **TOPOGRAPHIC MAP** | FIG. No. |
| Drawn By: SAB/AAS | Scale: Not to scale | 21905 64th Avenue W., Ste 100 Mountlake Terrace, WA 98043 | 301/305 Central Avenue N & 215 E Smith Street<br>Kent, King County, Washington<br>Vivolo Family Trust, LLC | 1 |
| Checked By: MDN | File No. topo figure1 | PH. (425) 771-3304 FAX. (425) 771-3549 | | |
| Approved By: MYW | Date: June 2014 | | | |




| | | | |
|---|---|---|---|
| Project Mngr: MDN | Project No. 81137082 | Terracon Consulting Engineers and Scientists | **SAMPLE LOCATION PLAN** |
| Drawn By: AAS | Scale: APPROX AS SHOWN | 21905 64th Avenue W, Ste 100 Mountlake Terrace, WA 98043 | 301/305 Central Avenue North & 215 East Smith Street |
| Checked By: MDN | File No. UST Figs 3-5.dwg | PH: (425) 771-3304 FAX: (425) 771-3549 | Kent, King County, Washington |
| Approved By: MYW | Date: June 2014 | | Vivolo Family Trust, LLC |

FIGURE 3

WASHINGTON STATE DEPARTMENT OF ECOLOGY

# UNDERGROUND STORAGE TANK
## Site Check/Site Assessment Checklist

FOR OFFICE USE ONLY
Site #:_____
Facility Site ID #:_____

## INSTRUCTIONS

When a release has not been confirmed and reported, this Site Check/Site Assessment Checklist must be completed and signed by a person certified by ICC or a Washington registered professional engineer who is competent, by means of examination, experience, or education, to perform site assessments. **The results of the site check or site assessment must be included with this checklist.** This form must be submitted to Ecology at the address shown below within 30 days after completion of the site check/site assessment.

**SITE INFORMATION:** Include the Ecology site ID number if the tanks are registered with Ecology. This number may be found on the tank owner's invoice or tank permit.

**TANK INFORMATION:** Please list all tanks for which the site check or site assessment is being conducted. Use the owner's tank ID numbers if available, and indicate tank capacity and substance stored.

**REASON FOR CONDUCTING SITE CHECK/SITE ASSESSMENT:** Please check the appropriate item.

**CHECKLIST**: Please initial each item in the appropriate box.

**SITE ASSESSOR INFORMATION**: This information must be signed by the registered site assessor who is responsible for conducting the site check/site assessment.

**Underground Storage Tank Section**
**Department of Ecology**
**PO Box 47655**
**Olympia WA 98504-7655**

## SITE INFORMATION

Site ID Number (Available from Ecology if the tanks are registered): Not Registered
Site/Business Name: Taqueria El Rincosito
Site Address: 301/305 Central Avenue North (Street) Telephone: 206 587-3615
Kent (City) WA (State) 98032 (Zip Code)

## TANK INFORMATION

| Tank ID No. | Tank Capacity | Substance Stored |
|---|---|---|
| 1 and 2 | 5,000 and 6,000 | Gasoline |
| 3 and 4 | 500 and 550 | Gasoline |
| 5 and 6 | 875 and 800 | Gasoline |

## REASON FOR CONDUCTING SITE CHECK/SITE ASSESSMENT

Check one:

_____ Investigate suspected release due to on-site environmental contamination.
_____ Investigate suspected release due to off-site environmental contamination.
_____ Extend temporary closure of UST system for more than 12 months.
_____ UST system undergoing change-in-service.
X UST system permanently closed with tank removed.
_____ Abandoned tank containing product.
_____ Required by Ecology or delegated agency for UST system closed before 12/22/88.
_____ Other (describe): _____

## CHECKLIST

| Each item of the following checklist shall be initialed by the person registered with the Department of Ecology whose signature appears below. | YES | NO |
|---|---|---|
| 1. The location of the UST site is shown on a vicinity map. | MDN | |
| 2. A brief summary of information obtained during the site inspection is provided. (see Section 3.2 in site assessment guidance) | MDN | |
| 3. A summary of UST system data is provided. (see Section 3.1.) | MDN | |
| 4. The soils characteristics at the UST site are described. (see Section 5.2) | MDN | |
| 5. Is there any apparent groundwater in the tank excavation? | MDN | |
| 6. A brief description of the surrounding land use is provided. (see Section 3.1) | MDN | |
| 7. Information has been provided indicating the number and types of samples collected, methods used to collect and analyze the samples, and the name and address of the laboratory used to perform the analyses. | MDN | |
| 8. A sketch or sketches showing the following items is provided: | | |
| - location and ID number for all field samples collected | MDN | |
| - groundwater samples distinguished from soil samples (if applicable) | | N/A |
| - samples collected from stockpiled excavated soil | MDN | |
| - tank and piping locations and limits of excavation pit | MDN | |
| - adjacent structures and streets | MDN | |
| - approximate locations of any on-site and nearby utilities | MDN | |
| 9. If sampling procedures different from those specified in the guidance were used, has justification for using these alternative sampling procedures been provided? (see Section 3.4) | MDN | |
| 10. A table is provided showing laboratory results for each sample collected including; sample ID number, constituents analyzed for and corresponding concentration, analytical method and detection limit for that method. | MDN | |
| 11. Any factors that may have compromised the quality of the data or validity of the results are described. | | N/A |

| *12. The results of this site check/site assessment indicate that a confirmed release of a regulated substance has occurred.* | MDN | |
|---|---|---|

## SITE ASSESSOR INFORMATION

Michael D. Noll — Person registered with Ecology

Terracon Consultants, Inc. — Firm Affiliated with

Business Address: 21905 64th Avenue West, Suite 100 — Street

Telephone: (425) 409-2602

Mountlake Terrace — City

WA — State

98043 — Zip Code

*I hereby certify that I have been in responsible charge of performing the site check/site assessment described above. Persons submitting false information are subject to penalties under Chapter 173.360 WAC.*

7/1/2014 — Date

Michael D. Noll — Signature of Person Registered with Ecology

*If you need this publication in an alternate format, please contact Toxics Cleanup Program at (360) 407-7170. For persons with a speech or hearing impairment call 711 for relay service or 800-833-6388 for TTY.*

WASHINGTON STATE DEPARTMENT OF ECOLOGY

# UNDERGROUND STORAGE TANK
# Closure and Site Assessment Notice

See back of form for instructions

FOR OFFICE USE ONLY
Site ID #:
Facility Site ID #:

Please ✓ the appropriate box(es)
☐ Temporary Tank Closure ☐ Change-In-Service ■ Permanent Tank Closure ☐ Site Check/Site Assessment

## Site Information

Site ID Number: Not Registered
(Available from Ecology if the tanks are registered)
Site/Business Name: Taqueria El Rinconsito
Site Address (Street): 301/305 North Central Avenue
City/State: Kent, WA
Zip Code: 98032 Telephone: (206) 587-3615

## Owner Information

UST Owner/Operator: Vivolo Family Trust, LLC c/o Union Bank as Trustee
Mailing Address (Street): 1201 Third Avenue, Suite 900
(P.O. Box)
City/State: Seattle, WA
Zip Code: 98101 Telephone: (206) 587-3615
Owners Signature: [signature], Manager, Vivolo Family LLC

## Tank Closure/Change-In-Service Company

Service Company: IO Environmental & infrastructure Inc.
Certified Supervisor: Scot Overdick Decommissioning Certification No.: 8178938
Supervisor's Signature: [signature] Date: 6-9-14
Address (Street): 2200 118th Avenue SE
City: Bellevue State: WA Zip Code: 98006 Telephone: (425) 454-1086

## Site Check/Site Assessor

Certified Site Assessor: Michael D. Noll
Address (Street): 21905 64th Avenue West, Suite 100
City: Mountlake Terrace State: WA Zip Code: 98043 Telephone: (425) 771-3304

## Tank Information

| Tank ID | Closure Date | Closure Method | Tank Capacity | Substance Stored |
|---|---|---|---|---|
| 1 | 5/28/2014 | Removal | 5,000 | Gasoline |
| 2 | 5/28/2014 | Removal | 6,000 | Gasoline |
| 3 | 6/3/2014 | Removal | 500 | Gasoline |
| 4 | 6/3/2014 | Removal | 550 | Gasoline |
| 5 | 6/4/2014 | closed-in-place | 875 | Gasoline |
| 6 | 6/4/2014 | Removal | 800 | Gasoline |
| | | | | |
| | | | | |
| | | | | |

**Contamination Present at the Time of Closure**

■ Yes ☐ No ☐ Unknown
Check unknown if no obvious contamination was observed and sample results have not yet been received from analytical lab.

■ Yes ☐ No
If contamination is present, has the release been reported to the appropriate regional office?

To receive this document in an alternative format, contact the Toxics Cleanup Program at 360-407-7170 (voice) or 1-800-833-6388 OR 711 (TTY)

NR - Kelley

DEPARTMENT OF ECOLOGY
State of Washington

# UNDERGROUND STORAGE TANK (UST)
# 30-DAY NOTICE

(See back of form for instructions)

| FOR OFFICE USE ONLY |
|---|
| Site ID # |
| FS ID # |

Please ✓ the appropriate box: ☐ Intent to Install ☒ Intent to Close

HQ (360)407-7170 / Central (509)575-2490 / Eastern (509)329-3400 / Northwest (425)649-7000 / Southwest (360)407-6300

## SITE INFORMATION

N/A
Tag or UBI number

Taqueria El Rinconsito
Site Name

301/305 Central Avenue North
Site Physical Address

Kent 98032
City Zip Code

206-587-3615
Site Phone Number

RECEIVED
MAR 14 2014
Department of Ecology
Toxics Cleanup Program

## OWNER INFORMATION
(this form will be returned to this address)

Vivolo Family Trust, LLC c/o Union Bank as Trustee
UST Owner/Operator

1201 Third Avenue, Ste. 900
Mailing Address/PO Box

Seattle 98101
City Zip Code

206-587-3615
Owner/Operator Phone Number

linda.hessler@unionbank.com
Owner/Operator Email Address

## TANK INFORMATION

| Tank ID | Substance Stored | Capacity | Date Project is Expected to Begin | Comments: |
|---|---|---|---|---|
| N/A | gas | 5,000 | 4-14-14 | there is potentially a 5th tank under the sidewalk approximately 300-500 gal |
| N/A | gas | 6,000 | 4-14-14 | |
| N/A | gas | 300 | 4-14-14 | |
| N/A | gas | 300 | 4-14-14 | |

## 1) SERVICE PROVIDER INFORMATION - check the appropriate boxes

PLEASE NOTE: INDIVIDUALS PERFORMING UST SERVICES MUST BE ICC CERTIFIED OR HAVE PASSED ANOTHER QUALIFYING EXAM APPROVED BY THE DEPARTMENT OF ECOLOGY.

☐ Installer ☐ Decommissioner ☒ Site Assessor

Terracon Consultants, Inc.
Service Provider Company Name

Eric A. Dubcak
Certified Service Provider Name

ICC 8144913 exp 2/6/16
ICC Certification #

Eric A. Dubcak
Contact Person

425-771-3304
Contact Phone Number

eadubcak@terracon.com
Contact Email Address

## 2) SERVICE PROVIDER INFORMATION (REQUIRED IF USING MORE THAN ONE PROVIDER) - check the appropriate boxes

☐ Installer ☒ Decommissioner ☐ Site Assessor

Filco Company, Inc.
Service Provider Company Name

Nate Montgomery
Certified Service Provider Name

ICC 5050940 exp 2/14/16
ICC Certification #

Nate Montgomery
Contact Person

206-547-8347
Contact Phone Number

nate@filcoenviro.com
Contact Email Address